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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/868,945	06/21/2001	Phillip S. Wilson	P281188	6284

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EXAMINER
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SALVATORE, LYNDIA

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 03/14/2003

*B*

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/868,945

Applicant(s)

WILSON, PHILLIP S.

Examiner

Lynda M Salvatore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on 21 June 2001.

2a) ☐ This action is FINAL.

2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) 1-5 is/are pending in the application.

4a) Of the above claim(s) 6-10 is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☒ Claim(s) 1-5 is/are rejected.

7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some \* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.

4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction is required under 35 U.S.C. 121 and 372.
2. This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.
3. In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.
  - I. Claims 1-5 drawn to reinforced molded article classified in class 428, subclass, 172.
  - II. Claims 6-10 drawn to method of producing a reinforced article, classified in class, 264, subclass, various.
4. The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Specifically, the term "special technical features" is defined as meaning those technical features that define a contribution which each of the inventions considered as a whole, makes over the prior art. Presently, independent claims 1 and 6 lack unity of invention since they do contribute to an improvement over the prior art of record. The patent issued to Okada et al., discloses a composite material comprising a polymer matrix and layers of silicate uniformly dispersed within said matrix material. The reinforcing layers have the same thickness range and amounts as taught by the Applicant.
5. During a telephone conversation with Jack Barufka on February 12, 2003 a provisional election was made without traverse to prosecute the invention of a reinforced molded article,

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claims 1-5. Affirmation of this election must be made by applicant in replying to this Office action. Claims 6-10 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

6 Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the ~~currently named inventors is no longer an inventor of at least one claim remaining in the~~ application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

7 Applicant is advised that the reply to this requirement to complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 3 and 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. Claim 3 is indefinite because of the abbreviations (e.g., PVC/ABS, TPO, PP and TPU), used to describe the decorative material. It is unclear what materials are encompassed by said abbreviate the terms.

11. Claim 4 is indefinite because it is not clear what distinguishes a cloth from a fabric, since in the textile arts the two terms are synonymous.

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al., US 4,739,007 in view of Christiani et al., US 5,747,560.

The patent issued Okada et al., discloses a composite material comprising a polymer matrix and layers of silicate uniformly dispersed within said matrix material (Abstract). Okada et al., teaches that the silicate layers have a thickness ranging from .7-1.2 nm thick (Column 2, 22-29). The amount of silicate layers dispersed in the polymer matrix ranges from .5 to 150 parts by weight per 100 parts by weight of the polymer matrix (Column 3, 44-50).

Okada et al., fails to explicitly state the exact number of layers, however, the patent issued to Christiani et al., teaches a nanocomposite comprising a polymer matrix material having uniformly dispersed platelet particles (Column 3, 20-25). Christiani et al., teaches that the number of platelet particle layers are preferably less than about 5 layers in thickness, most preferably about 1 or 2 layers in thickness (Column 6, 55-64).

Therefore, motivated to provide a layered particle composite it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the teachings of Christiani et al., and form a composite material with less than about 5 layers in thickness.

With regard to the protrusion limitation, Christiani et al., teaches that composite articles may further embossed (Column 24, 45-50). Embossing would produce the recited protrusions in

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claim 1. As to the height and thickness limitation of the embossed protrusion, it is the position of the Examiner that these features are dependent on the desired end use of the composite and easily determined by one of ordinary skill in the art.

With regard to claim 2, Christiani et al., teaches molding the composite into a variety of shapes such as panels and sheets. Christiani et al., further teaches laminating the sheets and panels to other materials such as plastic films (Column 24, 43-49).

With regard to claim 3, Christiani et al., does not explicitly teach the type of plastic film used, however, it would have been obvious to one having ordinary skill in the art at the time the invention was made use a polypropylene film, or other thermoplastic polyolefin since these materials are commonly used in the field of films. It has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ

14. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al., US 4,739,007 in view of Christiani et al., US 5,747,560 as applied to claim 1, and further in view of Simm et al., US 4,447,488.

The combined references of Okada et al., and Christiani et al., fail to teach adhering a textile material to the reinforced molded article, however, the patent issued to Simm et al., teaches a shaped article comprising a synthetic resin and optional additives such as silicate fillers (Column 1, 8-15 and Column 4, 5-10). As discussed above Christiani et al., teaches laminating the sheets and panels to other materials such as plastic films (Column 24, 43-49). The shaped articles taught by Simm et al., are suitable for use as bumpers and decorative moldings (Column

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48-52). Simm et al., also teaches joining the shaped articles to other materials such as glass mats and textile fabrics (Column 7, 25-28).


Therefore, motivated to provide a decorative composite it would have been obvious to one having ordinary skill in the art at the time the invention was made to adhere textile fabrics as taught by Simm et al., to the composite structure of Okada et al., and Christiani et al.

### *Conclusion*

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynda M Salvatore whose telephone number is 703-305-4070. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

ls   
March 10, 2003

  
CHERYL A. JUSKA  
PRIMARY EXAMINER